## **Docket No. 217 – Development and Management Plan Inspection**

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

**Date:** November 23, 2005

Inspector: Diana Walden

Location: 345kV Underground Route

Storm/

**Rain Event:** Approximately 1.44- 1.70" of rain fell over 11/21-11/22 as reported by NOAA.

Areas of Inspection	Observation	Recommended Action
Vault Openings and Trench Construction	- Trenching and pipe installation, continue in several locations along Rt. 7 in Wilton. 10/27-11/23/05 Work near Catalpa Rd. has finished up but bare soil remains here and near the Rt. 7/107 intersection. 11/23/05	-Most of the work noted is just off the roadway edge and seems contained for the most part. Continue providing good "house- keeping" along the roadways. 11/23/05
	- Trenching and pipe installation, continued during the day along Umpawaug Road, 10/5-11/23/05	-See additional sections for more information. 11/23/05
	Work, including sawcutting, is moving north to Mallory Lane The Horizontal Direction Drill at School Rd. is ongoing but there are potential issues with the drilling muds even though improvements were made to the erosion controls. 11/23/05	-Some issues were still noted with containment of drilling muds. See additional sections for more details. 11/10-11/23/05
	-Some minor earthwork was occurring at the High school jack and bore but may be for the town project. 11/23/05	- See erosion control section for more details. Kemsco equipment was on site 11/23/05
	- The J&B operation near the Georgetown Deli is ongoing. 11/2-11/23/05	- This area looks mostly well contained but see additional sections for more details. 11/23/05
Erosion and Sediment (E&S) Controls (includes inspection	- Reseeding/restoration was noted in a number of areas and	- Continue to restore disturbed areas in the appropriate time

Areas of Inspection	Observation	Recommended Action
within 24 hours of a storm event)	it is scheduled to continue. 11/23/05	frame as per the D&M plan. 11/23/05
Erosion and Sediment (E&S) Controls continued	- Attempt to control all catch basins as well as outlet points off the road when work is in the vicinity. 11/23/05	- Make sure that haybales are placed in the catch basins during the work and continue to maintain them until bare soil is gone. Filter fabric is
Route 7	- The Catalpa Rd. area work has finished but bare soil remains here as well as at the Rt. 107/7 island. Catch basins should be protected as long as bare soil is present. 11/10-	also an accepted measure if haybales are difficult to maintain. 11/10-11/23/05
	11/23/05 - Restoration/hydroseed was noted near Scribner Hill Rd.	-Continue restoration efforts along the roadway where work is complete. 11/23/05
	- The HS J&B area is well graded on the north side of the stream but additional earthwork was noted to the south. 11/23/05	-Kemsco equipment was noted here. If this is project related work, erosion controls need some attention. 11/23/05
	-Underwater sediment accumulation was still noted in the stream at the J&B in several locations. 11/10- 11/23/05	-The least impacting way to remove the sediment is likely by hand/shovel. It should be done carefully and with the instream controls in place. 11/10-11/23/05
	- At the HDD, the detention area continued to hold a significant amount of turbid water. It did not appear the recent rain caused major spillover. Turbidity appear partly due to containment issues with the drilling muds. Erosion controls had been improved and haybales check dams were installed in the channels beyond the outer perimeter controls. 11/23/05	-Improvements to the controls were good and the haybales helped to filter sediment. A minor amount of turbidity was noted beyond the bales. Determine how to reduce turbid run-off to this basin and reduce the amount of standing water here. 11/23/05
	- The portion of the site to the east has been encompassed in additional silt fence. Standing turbid water is also present here in a technically wetland area. An additional line of silt fence between the existing	- Extend the silt fence in this location and reduce turbidity through the mud containment issue. 11/23/05

Areas of Inspection	Observation	Recommended Action
Erosion and Sediment (E&S)Controls (continued)	fence and stone berm will likely help filter this area further (see photo) 11/23/05  - Piles of drilling mud were accumulating near the tanks on site and turbid washwater or run-off was also noted here. This was also adding turbidity to the basin and pooled area to the east. A pile of mud was also noted near the silt fence here. 11/17-11/23/05	-Determine why the muds did not remain enclosed in the tanks and make sure they remain contained. The basin should not be holding turbid washwater from the drilling operation this was not the intended purpose. 11/17-11/23/05  - Remove accumulated mud and store properly. 11/17-11/23/05
Route 7 continued	- The storage area near #848 (Rt.7) had silt fence still well installed by the wetland swale with several small stockpiles adjacent. Asphalt piles and bare soil were noted towards the other swale near Rt. 7 where erosion controls are not in place. 11/23/05	- Continue to monitor activity in here. Some of the work is from the landowner. Watch placement of materials in the vicinity of this swale. 11/23/05
	- The CL&P yard has been placed with a stone access path and the perimeter silt fence has been installed. 11/10-11/23/05	- The Norwalk river is immediately down gradient here so controls should be maintained. 11/10-11/23/05
Rt. 107 Daywork	- The J&B operation at the Georgetown Deli is in good shape with erosion controls still well installed and haybales supporting discharge hoses. 11/17-11/23/05	- Continue to monitor carefully and be proactive in maintenance. 11/23/05
	-The level of the stream had risen and the base of the silt fence was in water at the dewatering discharge point. A small amount of turbidity was noted here due to changing of a filter and the silt fence was helping to contain it for the most part. 11/23/05 - The good system for filtering the discharge water is still in place and a filter bag was	- The system is still working well and water in the stream remains clear at the downstream portion. 11/23/05

Areas of Inspection	Observation	Recommended Action
	added. 11/23/05.	
	- The receiving pit is installed with good erosion controls such as stone, haybales and silt fence, in place. The culvert pipe is installed awaiting the installation of the HPFF pipe. 11/23/05	-None at this time, continue to monitor. 11/23/05  -Turbid water should not be
Umpawaug Rd.	-Be sure to control catch basins and swales with haybales or fabric here. 11/10- 11/23/05	released to the streets with the potential to enter unprotected catch basins. Disturbed soil in this area also provides potential for sedimentation Make sure haybale check dams are in place in swales. 11/10-11/23/05
	- Silt fence has been installed along the wetland edge near Wayside Lane but several locations are worn. 11/23/05	- Continue to be proactive in maintenance due to the wetlands immediately off the road here.11/17-11/23/05
	- Some restoration efforts were also noted along the roadway along with several areas of bank cuts and bare soil due to work. 11/23/05 - Silt fence was installed	- Continue to provide restoration within adequate time. 11/23/05
	appropriately around a stockpile at the Diamond Hill Rd. side but a vault near #123 remains un-restored. 11/23/05	-Provide restoration measures here. 11/23/05
	- The wet swale at Parsons Lane was recontoured and well restored with mulch along the side. Water in the pond and swale is clear at this time. 11/23/05	-None at this time. The area is improved as recommended 11/23/05
	- The large disturbed slope area was well restored with mulch. Erosion controls remain well in place but runoff has created some erosion along the side of the slope. 11/23/05	- A haybale here may help prevent some sedimentation down the slope (if this work is part of the 345kV). 11/23/05
Adjacent Wetlands and Waterways	-At the jack and bore near Allens Meadow Park, the stream had some remaining	- Hand shoveling is likely the best solution with instream controls in place. 10/27-

Areas of Inspection	Observation	Recommended Action
	accumulated sediment under the water which needs to be removed. 11/10-11/23/05  -The stream at the Georgetown Deli jack and bore remains very clear downstream of the work.	-Continue to be proactive with erosion control maintenance. 11/23/05
	11/23/05 - The pond nears Parsons Lane is clear following the turbidity event a few weeks ago. 11/23/05 - Wetlands south of the HDD are mostly in good shape with additional controls/check dams installed. Some slight turbidity is still getting beyond the controls. The wetland area to the east of the basin however has standing turbid water. 11/23/05	- None at this time. Watch any discharge to catch basins contributing to this area. 11/23/05  Determine how to contain mud issues to help reduce turbidity. Close off the work site from this area with silt fence. 11/23/05
Staging, Storage, and Parking Areas	- The silt fence at the equipment storage yard located on property south of the Rt. 7 &107 intersection is up along the back portion of the property but down near the swale closest to Rt. 7. Asphalt piles were noted here. 11/23/05  -Additional silt fence has been added at the School Rd. HDD area along the eastern side but one more cross-line of fence will help protect the wetland here. 11/23/05	- In general, materials should be placed appropriately in storage areas or immediately adjacent to work each night. No potentially spillable materials should be left behind or out overnight. 11/23/05 - Take care with materials or disturbance too close to the swale by Rt.7. 11/23/05 -Install the additional fence and control turbidity issues. Extraneous drilling muds need to be removed or stored. 11/23/05
	- The racquet club storage yard is very active with a lot of materials. Make sure inlets here are protected. 10/27-11/23/05  - A small bare soil/graded area remains at the Umpawaug Rd. Rt. 107 intersection. 11/23/05  - Equipment was noted all along the shoulders on	- Keep within the limits of the yard and don't encroach into the brush. 10/27-11/23/05  - Continue to maintain fence here and restore ruts caused by equipment just down gradient from here. Restore when feasible11/23/05  - Make sure equipment is not

Areas of Inspection	Observation	Recommended Action
	Umpawaug. 11/23/05	parked over swales. 11/23/05
	- The CL&P yard has erosion controls well in place. 11/23/05	- None at this time continue to monitor. 11/23/05
Soils	- Most soils in roadways on the project route are being trucked to a waste facility in Danbury for storage and eventual disposal. However, any soils from the work in Redding which meet the RSR levels can be used in the landfill as daily cover.  - Backfill soils are allowed to be stored along Umpawaug Rd. but only for the day. 10/5-11/23/05	- Soils appear to be handled appropriately. 11/23/05  -In general, if any pile remain longer than the day, controls should be placed. 11/23/05
State species of concern, threatened and endangered species	- No species of concern are located in this area of construction.	- N/A
Vegetative clearing limits (including trees to save or danger trees noted)	-Restoration has been noted in a number of locations along Rt. 7 including hydroseed at Scribner Hill Rd. and mulch along some spots on Umpawaug Rd. 11/23/05	- Attend to disturbed areas in the appropriate time frames. 11/10-11/23/05
Dewatering	-Several frac tanks are still in place at the Georgetown Deli parking lot in order to hold the water from the jack and bore pits here. 11/23/05  - The system here seems to work well with filtration occurring in the tanks. The water is sent to a riprap pad, through a silt fence and back to the stream .11/10-11/23/05  - A filter bag was also added to the system and water levels in the stream were high. 11/23/05	-None at this time. Continue to monitor for effectiveness. The water in the stream was very clear at the time. 11/23/05  - Slight turbidity occurs when filters are changed along the system but the silt fence helps to control this. 11/23/05  - Water is also being sampled. 11/23/05
Blasting	- No blasting is occurring on site at this time.	- None at this time.

Areas of Inspection	Observation	Recommended Action
Spills and Material Storage	- A pile of drilling muds was noticed accumulating below the tanks and piled against the silt fence at the HDD site. The leaks seem to have continued and turbid water was also noted here. 11/23/05	-Determine what is causing the overflow/loss of muds and contain them. Remove the piles that have formed and attempt to remove additional water from the basin. 11/23/05
	- In general, make sure that glues, asphalt components and other materials are stored well overnight and not left out along the roadway. 11/23/05	- The contractors should remain vigilant about securing and handling fuel containers Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they will be used or stored on site Check equipment status on a regular basis and keep spill kits on hand Report spills immediately, even if they are being controlled.
Additional Observations		

Next likely scheduled		
inspection:	Thursday, December 1, 2005	

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

Inspector's Signature:	Diana Walden	
		_





345kV (Umpawaug Rd Daywork): The photo on the left shows a stockpile left near the Diamond Hill Rd. end with silt fence installed as recommended. The photo on the right shows a vault in the same general area that needs some restoration. 11/23/05





Photo on the left shows the large slope where mulch was applied. Photo on the right shows where some stormwater has created some erosion along the edge of the slope. A haybale here may help the situation. 11/23/05





Photo on the left shows the pond near Parsons Lane which is clear at this time following the turbidity event noted a few weeks ago. Photo on the right shows wetlands in the vicinity of Wayside Lane. Erosion controls are becoming worn in a few locations. 11/23/05



View of the restoration of the wetland swale leading to the stream to the pond near Parsons Lane. Contours of the swale were re-created appropriately and the area was mulched. A haybale check dam remains in place. 11/23/05





345kV (Route 107- Georgetown Jack and Bore): Photo on the left shows the high water level of the stream with the silt fence helping to control a small amount of turbidity created during a filter change. Photo on the right shows a filter bag in place at the discharge point. 11/23/05





Photo on the left shows a general overview of the Georgetown Deli site. Photo on the right shows the stream adjacent to the jacking pit with erosion controls. The stream is running fairly clear at this point 11/23/05





Photo on the left shows the receiving pit with good erosion controls and filtration. Stone and haybales were placed adjacent to the stream. Photo on the right shows a view into the pit where the conduit pipe is in place. The HPFF pipe still needs to be placed through. 11/23/05





345kV (Storage Area Rt. 7/107): Photo on the left shows the silt fence with stockpiles adjacent. The fence remains in place here and some of the activities are the landowners. Photo on the right looks toward Rt. 7 where a wetland swale is adjacent. Take care to keep this area contained from the yard. 11/23/05





345kV (Rt 7): Photo on the left shows a view towards Catalpa Rd. where work has been recently. Areas should be restored when feasible Photo on the right shows good restoration with hydroseed in the vicinity of Scribner Hill Rd. 11/23/05





345kV (Wilton HS J&B): Photo on the left shows the stream which had several areas of accumulated sediment that should be removed to restore the stream to original conditions. Photo on the right shows some additional earthwork likely part of the town sewer project here although Kemsco equipment was on site. 11/23/05





345kV (HDD): Photo on the left shows the additional pooled area to the east of the basin which has received some turbidity. Erosion controls were installed to encompass this area. Photo on the right shows an overview of the basin where standing water remains. 11/23/05





Photo on the left shows where haybale check dams were placed appropriately into the channels leading from the basin. Photo on the right shows that the haybales are helping to filter some of the turbidity but minor amounts are still getting through. 11/23/05



Photo shows where additional silt fence was added to the east of the site as recommended but turbid water is still pooling up in this area. Silt fence across the area between the existing fence and the existing stone berm of the basin may help. 11/23/05





Photo on the left shows piles of drilling mud accumulating near the tanks on site. Turbid water running off from here is part of the issue. Photo on the right shows where a pile of drilling mud has been noted near the silt fence for several weeks. 11/23/05